



Launch Mission Execution Forecast

Mission: Falcon 9 NROL-108

Issued: 15 Dec 2020 / 0800L (1300Z)

Valid: 17 Dec 2020 / 0900 – 1200L (1400 – 1700Z)



Forecast Discussion: A weak frontal system remains stalled in Central Florida today, creating continued cloudy conditions with only slight chances of rain. On Wednesday, a wave along the boundary will strengthen into a low-pressure area and pull the boundary away. Overnight Wednesday into Thursday morning, strong high-pressure system moving east from southern Texas will bring cooler, drier air to the Space Coast. Winds will turn northerly and become gusty as cloud cover slowly clears through the day Thursday. The primary weather concern for Thursday is Liftoff Winds and the Thick Cloud Layer Rule associated with any lingering frontal cloudiness.

On Friday, cloud cover will be much diminished over the Spaceport, but gusty northeasterly winds will remain due to the strength of the high-pressure area. The primary weather concern Friday is Liftoff Winds.

Launch Day	Probability of Violating Weather Constraints					
	30%	Primary Concerns: Liftoff Winds, Thick Cloud Layer Rule				
	Weather Conditions					Additional Risk Criteria
	Weather/Visibility: None / 7 mi.	Clouds				Upper-Level Wind Shear: Moderate
	Temp/Humidity: 65°F / 82%	Type	Coverage	Base (ft)	Tops (ft)	Booster Recovery Weather: Low
24-Hour Delay	Liftoff Winds (200'): 330° 15-20 mph	Stratocumulus	Scattered	3,000	7,000	Solar Activity: Low
	Probability of Violating Weather Constraints					
	20%	Primary Concerns: Liftoff Winds				
	Weather Conditions					Additional Risk Criteria
	Weather/Visibility: None / 7 mi.	Clouds				Upper-Level Wind Shear: Moderate
		Type	Coverage	Base (ft)	Tops (ft)	Booster Recovery Weather: Moderate
		Stratocumulus	Few	2,000	4,000	Solar Activity: Low
		Cirrostratus	Scattered	28,000	30,000	
Note: The Probability of Violation (POV) is the chance that a Lightning Launch Commit Criteria (LLCC) or certain user constraints (surface winds, precipitation, and temperatures, etc.) will be violated during the launch window. It does not take into account upper-level wind shear, booster recovery weather, and solar activity.						
Next Forecast Will Be Issued		16 Dec 2020				